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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,760	09/25/2003	Robert Baseman	YO9-99-496 (00280588BA)	4384
30743	7590	02/08/2005	EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			MEINECKE DIAZ, SUSANNA M	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,760

Applicant(s)

BASEMAN ET AL.

Examiner

Susanna M. Diaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-28 is/are pending in the application.
- 4a) Of the above claim(s) 26-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Non-Final Office action is responsive to Applicant's election filed November 12, 2004.

Applicant has elected Group I, Species I (claims 20-25) with traverse.

Applicant's arguments are deemed to be non-persuasive (for the reasons presented below); therefore, non-elected claims 26-28 are withdrawn from consideration.

Claims 20-25 are presented for examination.

Response to Arguments

2. Applicant's arguments filed November 12, 2004 have been fully considered but they are not persuasive.

Applicant argues:

The undersigned notes that the preamble of claim 20 (group 1) and claim 27 (group 2) are identical. In addition, the undersigned notes that the first recited element in claims 20 and 27 are identical. Thus, the only difference between claims of group 1 and group 2 is the second recited element. It is also noted that part b of claim 20 and the second element of claim 27 are quite similar; one relates to optimizing supply chain design and the other specifies identifying optimal supply chain design. In view of this, it appears that the inventions of groups 1 and 2 would not be separately classified and there would be no undue burden on the Examiner to examine claims which primarily differ from one another respect to a single element. Similarly, species 2 (claim 26) includes the same preamble and same first recited element. This species would also appear to be classified the same classifications, and no undue burden would arise from examination of this claim. (Pages 1-2 of Applicant's response)

Claims 20-26 are directed toward actually optimizing a supply chain model, while claims 27-28 are directed toward identifying optimal supply chain designs. In other words, claims 20-26 focus on a particular model and a supply chain optimization thereof. Claims 27-28 recite that there are multiple supply chain designs from which to select in order to maximize profitability; therefore, claims 27-28 deal more with how to select which design to use as opposed to claims 20-26, which deal more with actually employing an already selected model. Therefore, the Examiner maintains that claims 20-26 are related to claims 27-28 as subcombinations usable together for the reasons set forth previously in the restriction requirement.

Regarding the identification of species, claims 20-25 (species I) are described on page 15, lines 4-22 of the specification. Claim 26 is described on page 15, lines 23-27 of the specification as an “alternative approach” to the three optimizations recited in claims 20-25. Clearly, this implies the existence of mutually exclusive embodiments since even the specification admits that either the three optimizations may be used to solve the network design problem *or* an **alternative** approach based on estimating the loss in profitability. Therefore, the Examiner maintains that claims 20-25 are related to claim 26 as separate species for the reasons set forth previously in the restriction requirement.

Claim Objections

3. Claim 25 is objected to because of the following informalities:

Claim 25, line 1, delete “and”, insert –an--

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 20-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 20-25 do not incorporate the use of technology to perform any core steps of the invention (e.g., an analysis step); therefore, claims 20-25 are deemed to be non-statutory.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Cohen et al. ("Global Supply Chains: Research and Applications").

Cohen discloses a method to assist decision-making, and to closely monitor various performance measures of an enterprise by extending supply chain management using financial management considerations, said method comprising the steps of:

[Claim 20] designing a supply chain model for a firm utilizing firm-specific information including strategic objectives, a desired level of risk, market position of the firm and industry competitive landscape (¶¶ 2, 7, 8, 23, 24, 28, 29, 45, 46);

performing ***at least one*** optimization technique selected from the group of:

- a. optimizing ownership structure and transfer pricing methodologies for an existing profit maximizing supply chain method;
- b. optimizing supply chain design for an existing ownership structure by seeking to maximize profit or value of the firm within the context of international taxation and foreign exchange risk;
- c. optimizing supply chain design simultaneously with ownership structure, with the objective of maximizing profit or the value of the firm (¶¶ 17, 29, 35, 37, 38 -- The objective of the global supply chain is to maximize profitability);

[Claim 21] wherein the step of optimizing supply chain design for an existing ownership structure considers the foreign exchange risk by trading-off the firm's profitability and benefits of reducing risk by creating a supply chain that is naturally hedged using a constrained mathematical model with this trade-off modeled in objective function, thereby creating an efficient frontier showing optimal expected profits for a chosen level of risk (Claim 21 further limits optimization technique (b) from claim 20,

which is an optional technique; therefore, the limitations of claim 21 are optional as well.

Cohen more fully addresses technique (c));

[Claim 22] wherein the step of performing at least one optimization technique is accomplished by using a network design problem methodology (¶¶ 24, 25, 27).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen et al. ("Global Supply Chains: Research and Applications"), as applied to claim 20 above, in view of Binder ("Managing Financial Risk Into the 21st Century").

[Claims 23-35] As per claims 23-25, Cohen does not expressly teach the use of Monte Carlo simulation. However, Cohen's models do analyze the impacts of varying foreign exchange rate scenarios and the impacts of foreign exchange movements on profitability on a selected supply chain design, wherein a customer demand is correlated with foreign exchange rates (¶¶ 17, 29, 31, 32, 35, 37, 38, 40). Binder discusses the use of Monte Carlo simulation for assessing risks and maximizing earnings for a given level of risk, incorporating such factors as volatility in exchange rates and fluctuating currency values (¶¶ 4, 7, 9, 10). Cohen suggests the use of Monte Carlo simulation techniques since it utilizes option valuation models incorporating stochastic dynamic

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programming models and Monte Carlo simulation is a type of stochastic algorithm (¶¶ 24, 38). Furthermore, Monte Carlo simulation is commonly used to test the statistical significance of the results of a model, thereby representing the robustness of various models; therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to specifically utilize a Monte Carlo simulation to generate Cohen's disclosed models, wherein the step of designing a supply chain model further comprises the step of performing Monte Carlo simulation to test robustness of proposed supply chain designs (claim 23); wherein the Monte Carlo simulation provides an analysis of impacts of varying foreign exchange rate scenarios (claim 24); and wherein the Monte Carlo simulation provides an analysis of impacts of foreign exchange movements on profitability of a selected supply chain design, wherein a customer demand is correlated with foreign exchange rates (claim 25) in order to allow for more accurate determination of statistical significance of Cohen's tested models, as suggested by the fact that Cohen uses stochastic dynamic programming models as well as Binder's disclosure that Monte Carlo simulation is already known to be performed for the similar types of supply chain-related modeling performed by Cohen.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 4, 2005

Susanna Diaz
SUSANNA M. DIAZ
PRIMARY EXAMINER
Au 3623